LARS

Learning Among Regions on Smart Specialisation

The core of Smart Specialisation lies in discovering new opportunities. Discovering new innovative solutions stems from well-connected innovation networks in the regions but also from learning on innovative solutions in other regions.

This newsletter reports in a nutshell on the insights gained in the LARS project. The project is now in its transnational learning phase and this newsletter reports on the results in the past period.

Read about the methodology set in place for the project and how it may be useful for formulating public policies for Smart specialisation. It has helped in discovering new opportunities for collaboration in Lithuania and benchmarked successful practices in the partner regions. The LARS project has rendered an interest as far as in Latin America - read about where and how!

Contents

NEWSLETTER 4

JANUARY 2020

Interreg Baltic Sea Region

EUROPEAN UNION

EUROPEAN REGIONAL DEVELOPMENT FUND

What is the LARS Project?

11 partners from **8** regions in **8** countries

LARS helps the public sector lead Smart specialisation processes in their regions and connects innovation networks across regions

Project duration: October 2017–September 2020

BSR STARS
Innovation in the Baltic Sea Region

The six steps of LARS

1. Mapping of strategies in order to select the final intervention areas
2. Triple-helix gap analysis with the purpose of finding deficiencies and also good cases of innovation networks functioning
3. Matching partners in functioning transfer networks based on the "good" and "bad" practices
4. Learning on the transfers, essentially an innovation context analysis
5. Piloting new activities in the regions with the purpose of improving the innovation networks
6. Communicating the findings with a view on the wider implications of the project

The LARS partners

Regional Council of Ostrobothnia, Finland
University of Vaasa, Finland
Region Västerbotten, Sweden
Regional Council of Päijät-Häme, Finland
Hamburg University of Applied Sciences, Germany
Lithuanian Institute of Agrarian Economics, Lithuania
Ministry of Environmental Protection and Regional Development, Latvia
Lithuanian Innovation Centre, Lithuania
Oppland County Authority, Norway

Associated partners

CPMR Conference of Peripheral Maritime Regions
Office of the Marshal of the Pomorskie Voivodship, Poland

LARS Methodology Helped Disclose the Unused Collaboration Potential in Lithuania

Zivile Gedminaite-Raudone and Rita Vilkė,
Lithuanian Institute of Agrarian Economics

Despite the quickly developing biogas sector in Europe and broader, Lithuania is still remaining in the back among biogas producers in the EU and there are seasons behind. The development of biogas production from agricultural waste and residues has been identified as one of priorities in Lithuania's Smart Specialization strategy.

However, more than evident for every Lithuanian citizen, that collaboration for biogas production performs significant difficulties in Lithuania. This accelerated Lithuanian LARS scientific team to select collaboration for biogas production as a particular case for circular economy investigations using LARS methodology in Lithuania.

Biogas is already produced in Lithuania for more than 20 years. Production of biogas starts being promoted since the year 2011 after the Law on Renewable Energy of the Republic of Lithuania. In January 2013, first winners of the first biogas auction fixed electricity purchase tariff with approved quota of 18 MW(Megawatt). However further biogas production promotion was stopped. There were 36 operating biogas plants in Lithuania in 2018: agricultural waste (14) 13.3 MW; landfill waste (9); sewage sludge (8) and Bio-waste and Industrial waste (5). In total, 36 power plants in Lithuania provide capacity of 9.481 MWth (Megawatt thermal) and 30.218 MWel (Megawatt electric).

In the agricultural sector biogas plants counts up to a decade. At the same time, agricultural sector is the main biogas producer in Lithuania (61.68 %) (Statistics Lithuania, 2018). Biogas production from agricultural, landfill and sewage sludge waste in 2016 exceeded 67.6 million m3 in total, whereas annual natural gas consumption in Lithuania exceeds around 2.3 billion. Production of biogas in the year 2017 reached only 4.3 percent of all produced energy in Lithuania in m3.

Smart Specialization research, done in Lithuania using LARS methodology has been presented to a broad scientific audience in the indexed scientific journal "Agricultural Economics"[1]. Research is addressed to the use of collaboration as a tool for increasing efficiency of investment in entrepreneurship, research

1 Gedminaitė-Raudonė Ž., Vidickienė D., Vilkė R. (2019): Unused potential for Smart Specialization development through collaboration: Lithuanian case. Agricultural Economics – Czech, 65: 463–469.

Zivile Gedminaite-Raudone and Rita Vilkė, Lithuanian Institute of Agrarian Economics

and innovation in a service-driven post-industrial economic system. It provides evidence that collaboration potential is used only partly during the implementation of Smart Specialization strategy in Lithuania. Such an important tool in post-industrial economy as collaboration has not been taken into account during strategy formulation and in the action plan for the implementation.

The research illustrates given thesis by the evaluation of collaboration in Lithuanian biogas sector, which is listed among the priorities of Lithuania's Smart Specialization strategy till 2020, using structured interviews. The main aim of this empirical research was to assess the will to collaborate in order to enhance the development of Smart Specialization and identify unused collaboration potential among all Quadruple Helix model counterparts in the biogas sector.

Empirical findings show that collaboration in the Smart Specialization development has a big potential. However, this potential is used only partly, and there are reasons behind. You will disclose these reasons and explanations of them after reading the open access article online: https://doi.org/10.17221/98/2019-AGRICECON. Research findings serve as guidelines for policy makers, entrepreneurs, university and NGO managers for future development of CAP actions and measures, as well as overall Smart Specialization strategy improvement.

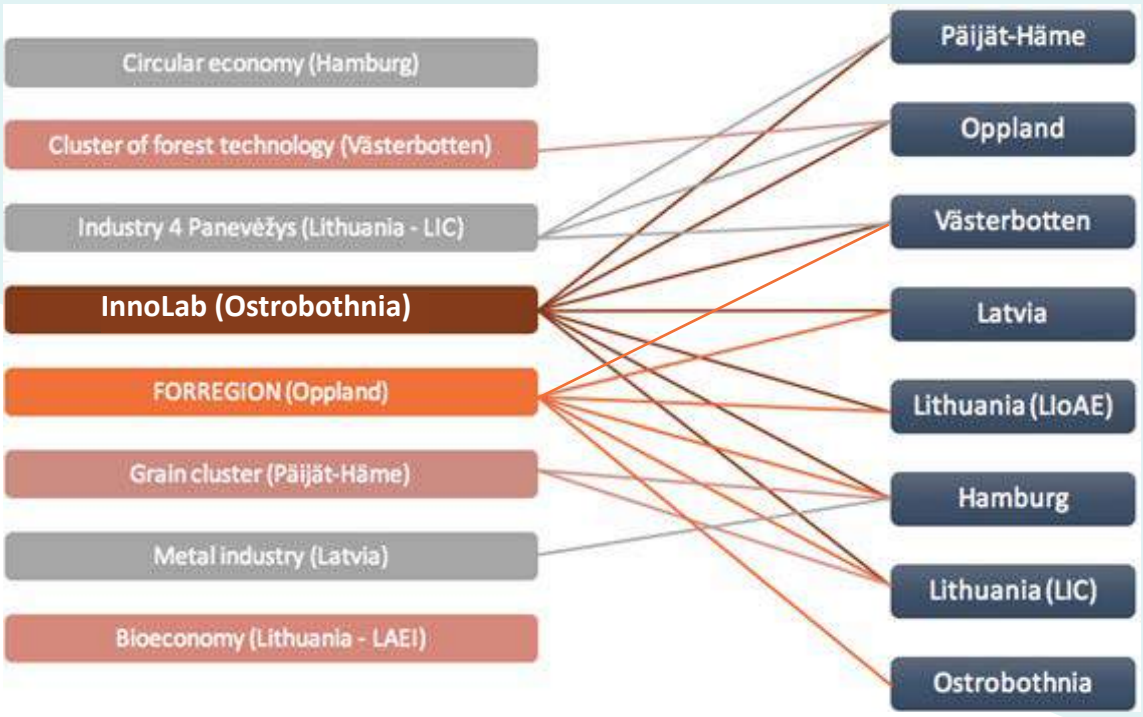
Focus group meeting in Vilnius, Lithuania

Successful Practices Used for Benchmarking in the LARS regions

Jelena Barbir, Hamburg University of Applied Sciences

The Regions in the LARS project gathered in Hamburg following the completion of the work in the fourth period of the project. The meeting analyzed and learned on successful practices in each region and on underlying reasons.

From the other presented practices, each region could select at least one good practice from other LARS regions that can help them to overcome the gaps they have, identifying their matches in the Transnational Learning Seminars by stakeholders. The following figure shows the good practices and their matches.



The most popular good practice is **InnoLab** from Ostrobothnia region, a university-driven practice that was selected as benchmarking for all partners. This initiative consists in different platforms to lower boundaries for companies, NGOs, public organisations and civil society to contact universities.

This policy based on good relations among helixes' actors allows to open doors for cross-sectoral collaboration and it is considered powerful to close regions' gap, since new discoveries can often be found through cross-sectoral approach, it lowers the organizational barriers and opens doors for wider society and it allows for implementing the open-science concept, a rising trend in the global research field.

Forregion in Oppland is another popular good practice and five partners (Latvia, Lithuania – LAEI, Hamburg, Lithuania – LIC and Ostrobothnia) selected it as a possible initiative to overcome their gaps. It is public organization-driven that promotes research-based innovation and collaboration with researchers and scientists for businesses with little or no research and development experience, increasing their internal capacity of innovation. Forregion allows the interaction between research and scientific institutions and business (SME and bigger companies), as well public organisations act as intermediaries, providing support (financial and knowledge) to push innovations, envolving the helixes' actors.

Industry 4 Panevėžys is a company and NGO-driven initiative that incorporates different activities aimed at the development of the Industry 4.0 in the region of Panevėžys and it establishes a platform where experts from various fields discuss and present important regional trends, helping regions and sub-regions to transform and be more innovative with basis in their strengths. This practice allows lower collaboration boundaries between different stakeholders, including business, education, science and public sector representatives in order to foster the innovative ideas generation, knowledge sharing and ensure the continuous flow of the investment in the region.

Some regions believe Industry 4 Panevėžys, as a benchmark, can teach how to start the transformation of the regional strategy in whole innovation ecosystem: starting from primary schools and informal learning and continuing with the R&D institutions that develops solutions for local companies.

Grain cluster was selected by two regions as a good practice that can bridge their gaps. This is a company-driven practice that connects industry companies and universities, research institutes and NGOs, fostering circular economy for more efficient and innovative use of resources.

The focus is not copying the chosen good practice directly, however transferring it into the regional context. Therefore, the steps toward the implementation of good practices in the regions could start making a more detailed analysis of the chosen practice and engage other institutions like companies, public administration and NGOs.

Partners reported that transnational learning by good practices could bring useful elements for their regions, allowing benchmarking to bridge the gaps.

LARS partners working with selecting good practices from the participating regions

The Role of Policy Regulation to Advance Circular Economy in Waste Incineration

Karita Luokkanen-Rabetino, Vebic@University of Vaasa
Olli Alhoniemi, Westenergy

Westenergy and the research platform VEBIC@University of the Vaasa attended the 10th Annual Forum of the EU Strategy for the Baltic Sea Region in Gdansk in June 2019.
In the session of Enhancing Business-Driven circular economy, organized by LARS project, Westenergy and Vebic discussed the role of policy regulation to advance circular economy in waste incineration.

Carrot and stick

Policy regulation has have a central role on the development of waste incineration and waste-to-energy sector in Finland. The sector started to develop rapidly, after the EU waste incineration directive was set in 2005. This directive gave clear and strict criteria how waste-to-energy plants should operate.

Later on, the renewal of national waste act, and the landfill ban of organic waste, reinforced the importance of waste incinerators. In addition, the national energy regulation is favorable for waste-to-energy plants, allowing them to provide energy and district heat to the national and local energy systems without any restrictions.

Even being strict, the regulation created safe and stable environment for long-term investments where waste-to-energy plants

Photo: Westenergy

could develop circular economy solutions based on waste refining. Currently nine waste-to-energy plants operate in Finland, and the tenth plant is under construction.

In 2010s, the atmosphere and political discourse related to waste refining plants' position as a circular economy builder started to receive opposing and skeptical views. The concerning news related to the climate change, overuse of natural resources, modest growth on recycling rate, and the increasing amount of waste triggered a political debate regarding the necessity to introduce unfavorable policy mechanism towards waste incineration. Those initiatives included emission trading and taxation, aiming at increasing the recycling rate and decreasing the amount of incinerated waste.
However, the ability of those mechanisms to lead to the expected outcomes is questionable. As long as the consumption of goods grows, and the manufacturing industries are not obligated to take responsibility of the recycling activities, the amount of non-recyclable waste will grow. In the same fashion, the necessity for waste refining keeps growing, but it is just more expensive. In the worst scenario, the unfavorable mechanisms stops the circular economy efforts due to fact that the R&D budget allocated for circular economy sinks to the tax payments.

Circular economy innovation through Green deal and flexible authorization procedure

To advance circular economy companies need a stable, predictable and encouraging regulative environment. One mechanism that has a great potential to advance circular economy is the establishment of green deal between government and waste refiners. Green deal is a voluntary program, which offers a positive alternative for taxation. Green deal initiative was introduced in Finland in 2018.

On February in 2019, waste-to-energy companies presented to the ministry innovative and ambiguous project ideas, which aim at advancing sustainability and climate issues. These ideas ranged from plastic recycling to carbon neutral logistics. Currently, the realization of the greed deal is still unsure.

Other issue that would encourage incinerators to develop innovative circular economy solutions would require changes in the authorization procedure, which currently is slow and inflexible. In practice it means, that if companies want to explore and experiment something new based on waste streams, the process to get the permission to do it is slow and requires huge amount of paper work. Thus, policies that would enable and encourage experimentation are welcome.

Policy regulation can either enable or hinder the circular economy innovations in waste-to-energy sector. In this context, it is interesting to see, how the new Green deal programme, recently launched by European Commission, will treat the waste-to-energy sector.

How Does the Connectivity Model help Public Organisations in Smart Specialisation?

Antti Mäenpää, University of Vaasa

In the LARS project, the regions have been utilising the connectivity model as a tool for measuring regional connectivity. In Antti Mäenpää's doctoral dissertation, the model is inspected as a tool for public organisations and the focus is on understanding what the biggest issues in implementing smart specialisation are, and how the connectivity model responds to these challenges.

The focus is on the changing role of public organisations, as smart specialisation has put them in a mediating role in innovation activities. This change forces public actors to take their place among already established innovation agents, namely universities and companies. Whereas these previous institutions are well-established in their role in innovation as knowledge providers and users, public organisations still seek their place among the other actors and this creates challenges for them.

After inspecting the current literature, the study titled: "The Challenges of public organisations in coordinating smart specialisation and a connectivity model as one solution" suggests that there are three major challenges for public organisations, which are due to their coordinating role in smart specialisation.

Antti Mäenpää presenting findings of the LARS project

The three challenges are titled: stakeholder inclusion, knowledge generation and dominant actors.

Enhancing regional connectivity

As a response to the presented challenges, the study introduces a connectivity model, which is based on enhancing regional connectivity. This is one possibility for public organisations, as regional collaboration is one of the core challenges in managing a successful entrepreneurial discovery process. After an analysis the model is seen as a useful tool for public organisations, as it includes elements which enhance regional collaboration (focus group discussion and involvement of stakeholders), provide useful knowledge for the regional developers (gap analysis, regional discussions) and can limit the threat posed by dominant actors (by inviting everyone to the same table to discuss).

A useful model for S3 Strategies

The connectivity model is especially preferable for public organisations who do not know how to proceed with their regional smart specialisation strategy. Because the model is "pre-made" and does not require extensive funding (resources for one person for a couple of months is the minimum and some other transaction costs for a meeting room etc.) it could be utilised in very different types of regions. The LARS project is one proof of this.

Perhaps most importantly, the connectivity model offers the public organisations a good discussion opener, as it helps in engaging local stakeholders and both interviews and focus group meetings can provide a forum for wider regional discussion. This can lead to future projects and mutual collaboration, as the stakeholders and their work become better known within the region.

LARS on Rethinking Economic Development from the Periphery in Colombia

Jerker Johnson, Regional Council of Ostrobothnia

The LARS project activities have resulted in off-spring research, concluding on the project activities. An article published in the Basque Journal Ekonomiaz attracted the attention of the Smart specialization platform in Seville and the LARS project coordinator Jerker Johnson was invited as a speaker on the EC-session at the Regional Studies Association, Latin America Division Conference in Bogotá.

The theme of the conference was Institutions, Governance and Regional Development: Rethinking Local Economic Development from the Peripheries. In addition to the conference the team from the EC-session also held a workshop with the representatives from the Central Region of Colombia.

Many regions in Latin America have prepared strategies for Smart Specialisation and the dialogue with Europe has been promoted by the IUC program. In total 20 regions in Europe and Latin America have been beneficiaries of the Program, including the Region of Ostrobothnia. The experience in Latin America and Europe have both similarities and differences when applying smart specialisation.

Developing issues

During the conference several sessions addressed questions on the "deep Colombia" or on how to develop the least developed regions in the country including university programs for peace building. Correspondingly in Brazil education programs were prepared for the work on maintaining the bio-diversity of the Amazonas.

The dualism of the economies in many of the LatinAmerican countries are more pronounced compared to Europe. Hence in-

Participants in the workshop i October 2019 with the Central Region of Colombia exchanging experiences on Smart specialisation (article author Jerker Johnson on the right)

frastructural investments like roads connecting regions have in comparison a more profound economic impact in comparison with Europe that is relatively well connected. The dualism also means that forming inclusive policies are of greater importance than in Europe although inclusiveness is by no means unimportant in Europe.

Despite pressing challenges like the ones noted above, many regions have made strategies for smart specialisation. In the Central Region of Colombia, the innovation strategy is working with the transfer of knowledge, technology and applied research. The strategy for the Colombian capital region Bogotá-Cundinamarca aims at driving sophistication and diversification of the economy through hubs and a strategic pooling of resources. The work is carried out in a systematic way with corresponding approaches as used in Europe.

However, the work in Latin America cannot fall back on the multi-level framework when comparing with the European context. The EU commission Multi-annual Financial Framework (MFF) gives the learning process on Smart specialisation a stability as the innovation priorities and the financing are set for the programming period. This does not have its correspondence in Latin America. On the contrary does the top public administration change with political elections in many countries. Smart specialisation implies a continues, sometimes experimental, work learning on the functioning of the innovation system and concluding on the effectiveness of the policy interventions.

There is not one solution on how to formulate a strategy on smart specialisation. On the contrary it is being emphasised that the policies should include an experimental approach. The LARS-approach builds on the Ostrobothnian Method of Smart Specialisation, essentially a methodology for measuring innovation network quadruple-helix connectivity and linking the connectivity to good practices in the region as a base for learning.

Ways to learn from LARS

The LARS approach rendered interest both during the RSA conference and during the workshop with the Central Colombian Region. When rethinking the development from the peripheries the quadruple innovation network gap-analysis provides a feasible way to proceed in formulating a regional innovation strategy. Linking gaps to good practices provides a concrete way of learning and transferring experience for consideration in another context.

The approach builds on a well-established innovation model and links transnational learning to smart specialisation. The model has been applied in Ostrobothnia and now also in the Baltic Sea area and it is believed that the ideas are transferable and could well be applied in a Latin-American context.

The article published in the Basque Journal Ekonomiaz Johnson-Dahl-Mariussen: (2019): **Smart specialization driving the globalization of small and medium-size companies on the Finnish Region of Ostrobothnia, Revista Vasca de Economia No 95 pp.176-201**

The LARS-approach builds on the Ostrobothnian Method of Smart Specialisation, see: https://www.univaasa.fi/materiaali/pdf/isbn_978-952-476-577-0.pdf pp-127-132

Transnational Learning Seminar 4
Hamburg, Germany

Daniela Mårtenson, Regional Council of Ostrobothnia

The LARS project partners met up in Hamburg November 28th-29th for the partner meeting of this intensive and important phase of the project, this time hosted by Hamburg University of Applied Sciences.

Focus during the autumn 2019 meeting were good practices, regional challenges and the matching of these between regions, all part of the fourth work package of the project.

In Hamburg each region presented to each other their own good practice, the biggest gaps between expectations and experiences of their region and the proceedings of the local learning seminars with the regional stakeholders in which all the good practices of the LARS partners have been presented and discussed. Overall partners felt that the local learning seminars were fruitful and that the seminar concept worked on a regional scale.

Based on the discussions with stakeholders in every region each region presented the good practice that interested their region the most. At the end of the meeting a list of matches between problem and good practice was presented as a next step towards the fifth work package.

The specifics of how to document the process in work package four and the results from them were discussed. Through group discussions the elements of a good practice were explored further. This face to face meeting generated an agreement on putting an effort on documenting the good practice process in detail through success and failure factors and storytelling among more straightforward factual descriptions.

The project is now moving on to the next stage with Latvia taking the coordinating role of the fifth work package in which the aim is to test methods to transfer good practices to problems in other regions. This stage is greatly anticipated among the project partners and the substance and strict deadlines were discussed and agreed upon during the partner meeting in Hamburg.
The meeting was highly effective with the attendants also having time to enjoy the Christmas spirit in Hamburg through a traditional German Christmas market or “Weihnachtsmarkt”.

For more information about LARS, please visit

www.lars-project.eu

or contact the project manager, Mr Jerker Johnson
jerker.johnson@obotnia.fi, +358 44 320 6565

LARS

Interreg Baltic Sea Region

EUROPEAN UNION

EUROPEAN REGIONAL DEVELOPMENT FUND